

VASHKOV, V. I.

Session of the directing presidium of the I. I. Mechnikov All-
Union Society of Epidemiologists, Microbiologists, and Infectious
Disease Specialists. Zhur. mikrobiol., epid. i immun. 32 no.8:
152-156 Ag '61. (MIRA 15:7)

(EPIDEMIOLOGICAL SOCIETIES)

VASHKOV, V.I.

Concerning the history of the preparation of live tularemia vaccine.
Zhur. mikrobiol., epid. i immun. 32 no;9:156-157 S '61.

(TULAREMIA)

(MIRA 15:2)

VASHKOV, V.I.

Some data on the work of the sanitary and antiepidemic services in the
Chinese People's Republic. Zhur.mikrobiol., epid.i immun. 32
no.12:24-29 D '61. (MIRA 15:11)
(CHINA--COMMUNICABLE DISEASES--PREVENTION)

VASHKOV, V.I.; ISTOMINA, T.I.; POGODINA, L.N.; POLEZHAYEV, V.G.;
TIMONICH, O.P.; POZIN, Z.S., red.; PETROVA, N.K., tekhn. red.

[Handbook on disinfection, disinfection and deratization]
Spravochnik po dezinfektsii, dezinseksii i deratizatsii.
Moskva, Medgiz, 1962. 166 p. (MIRA15:10)
(INSECTS, INJURIOUS AND BENEFICIAL---CONTROL)
(DISINFECTION AND DISINFECTANTS) (RODENT CONTROL)

VASHKOV, Vasil'y Ignat'yevich; SHNAYDER, Yevgeniya Vasil'yevna;
BEN'YAMINSON, Ye.S., red.; ZUYEVA, N.K., tekhn. red.

[Chlorophos (dipterex); insecticidal properties and uses]
Khlorofos; insektitsidnye svoistva i primeneniye. Moskva,
Medgiz, 1962. 181 p. (MIRA 15:4)
(Insecticides) (Phosphonic acid)

BUGROVA, V.I., kand. med. nauk; VINOGRADOVA, I.N., kand. biol. nauk;
 D'YAKOV, S.I., kand. med. nauk; ZHDANOV, V.M., prof.;
 ZHUKOV-VEREZHHNIKOV, N.H., prof.; ZEMTSOVA, O.M., kand.
 med. nauk; IMSHENETSKIY, A.A., prof.; KALINA, G.P., prof.;
 KAULEN, D.R., kand. med. nauk; KOVALEVA, A.I., doktor mod.
 nauk; KRASIL'NIKOV, N.A., prof.; KUDLAY, D.G., doktor biol.
 nauk; LEBEDEVA, M.N., prof.; PERETS, L.G., prof. [deceased];
 PEKHOV, A.P., doktor biol. nauk; PLANEL'YES, Kh.Kh., prof.;
 POGLAZOVA, M.N., kand. biol. nauk; PROZOROV, A.A.; SINITSKIY,
 A.A., prof.; FEDOROV, M.V., prof. [deceased]; SHANINA-VAGINA,
 V.I., kand. biol. nauk; VYGODCHIKOV, G.V., prof., zamestitel'
 otv. red.; ADO, A.D., prof., red.; BAROYAN, O.A., prof., red.;
 BILIBIN, A.F., prof., red.; BOLLYREV, T.Ye., prof., red.;
 VASHKOV, V.I., doktor med. nauk, red.; VYAZOV, O.Ye., doktor
 med. nauk, red.; GAUZE, G.F., prof., red.; GOSTEV, V.S., prof.,
 red.; GORIZONTOV, P.D., prof., red.; GRINBAUM, F.T., prof.,
 red. [deceased]; GROMASHEVSKIY, L.V., prof., red.; YELKIN, I.I.,
 prof., red.; ZASUKHIN, L.N., doktor biol. nauk, red.;
 ZDRODOVSKIY, P.F., prof., red.; KAPICHNIKOV, M.M., kand. med.
 nauk, red.; KLEMPARSKAYA, N.N., prof., red.; KOSYAKOV, P.N.,
 prof., red.; LOZOVSKAYA, Ye.S., kand. med. nauk, red.;
 MAYSKIY, I.N., prof., red.; MUROMTSEV, S.N., prof., red.
 [deceased]; (Continued on next card)

HUGROVA, V.I.---(continued) Card 2.

NIKITIN, M.Ya., red.; NIKOLAYEVA, T.A., red.; PAVLOVSKIY, Ye.N., akademik, red.; PASTUKHOV, A.P., kand. med. nauk, red.; PETRISHCHEVA, P.A., prof., red.; POKHOVSKAYA, M.P., prof., red.; POPOV, I.S., kand. med. nauk, red.; ROGOZIN, I.I., prof. red.; RUDNEV, G.P., prof., red.; SERGIYEV, P.G., prof., red.; SKRYADIN, K.I., akad., red.; SOKOLOV, M.I., prof. red.; SOLOV'YEV, V.D., prof., red.; TRIBULEV, G.P., dotsent, red.; CHUMAKOV, M.P., prof., red.; SHATROV, I.I., prof., red.; TIMAKOV, V.D., prof., red.toma; TROITSKIY, V.L., prof., red. toma; PETROVA, N.K., tekhn.red.;

[Multivolume manual on the microbiology, clinical aspects, and epidemiology of infectious diseases] Mnogotomnoe rukovodstvo po mikrobiologii klinike i epidemiologii infektionnykh boleznei. Otv. red. N.N.Zhukov-Verezhnikov. Moskva, Medgiz. Vol.1. [General microbiology] Obshchaya mikrobiologiya. Otv. red. N.N.Zhukov-Verezhnikov. 1962. 730 p. (MIRA 15:4)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Zhdanov, Zhukov-Verezhnikov, Vygodchikov, Bilibin, Vashkov, Gromashevskiy, Zdrodovskiy, Rudnev, Sergiyev, Chumakov, Timakov, Troitskiy).

(Continued on next card)

BUGROVA, V.I.---(continued) Card 3.

2. Chlen-korrespondent Akademii nauk SSSR (for Imshenetskiy, Krasil'nikov). 3. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Planel'yes, Baroyan, Boldyrev, Gorizontov, Petrishcheva, Rogozin). 4. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Muromtsev).

(MICROBIOLOGY)

VASHKOV, V.I.

Brief news. Zhurn. mikrobiol., epid. i imm. 33 no.1:154-155
Ja '62. — (MIRA 15:3)
(COMMUNICABLE DISEASES)

VASHKOV, V.I.

Brief news. Zhur. mikrobiol., epid. i immun. 33 no.3:155-157 Mr '62.
(MIRA 15:4)

(MICROBIOLOGY--CONGRESSES)

(COMMUNICABLE DISEASES--CONGRESSES)

VASHKOV, V.I.; LEBEDEV, K.A.; GRENN AUS, G.I.; BLAGOVESHCHENSKAYA, G.S.

Brief news. Zhur. mikrobiol., epid. i immun. 33 no.7:154-
158 J1 '62. (MIRA 17:1)

VASHKOV, V.I.; SHNAYDER, Ye.V.; BRIKMAN, L.I.; ZAKOLODKINA, V.I.; CHUBKOVA, A.I.; ALIMBARASHVILI, TS.N.; BABAYANTS, G.A.; BERIANIDZE, I.Sh.; ZAKHAROV, P.V.; ISAAKYAN, A.G.; LEVIYEV, P.Ya.; MARTINSON, M.E.; MRACHKOVSKIY, S.K.; NAYDICH, N.L.; NESTERVODSKAYA, Ye.M.; RAZMANOVA, Ye.M.; SAVINA, K.V.; SERGEYEVA, A.Ye.; SOKOLOVA, M.Ye.; FOMICHEVA, V.S.; CHERNYSHOVA, V.A.; SHUMILOVA, T.V.

Sensitivity to DDT of houseflies in various climatic zones of the USSR. Zhur.mikrobiol., epid.i immun. 33 no.8:20-24 Ag '62.

(MIRA 15:10)

1. Iz TSentral'nogo nauchno-issledovatel'skogo dezinfektsionnogo instituta.

(FLIES—EXTERMINATION) (DDT)

VASHKOV, V.I., prof.; PAVLOVSKAYA, L.G.

Control of epidermophytosis in an industrial enterprise. Vest.
derm.i ven. 35 no.5:50-54 '62. (MIRA 15:5)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo dezinfektsionnogo
instituta (dir. -- prof. V.I. Vashkov).
(DERMATOMYCOSIS) (INDUSTRIAL HYGIENE)

VASHKOV, V.I.

The organization and principal trends of pest-control in USSR.
J: hyg. epidem. 7 no.1:74-81 '63.

1. Central Scientific Research Institute of Disinfection, Ministry
of Health of USSR, Moscow.
(INSECT CONTROL) (INSECTICIDES)

VASHKOV, V.I.; CHISTOVICH, G.N.; ZAVADOVSKIY, A.I.

Brief news. Zhur. mikrobiol., epid. i immun. 40 no.3:153-
156 Mr '63. (MIRA 17:2)

VASHKOV, V.I.; SHNAYDER, Ye.V.; ZAKOLODKINA, V.I.; BRIKMAN, L.I.; CHUEKOVA, A.I.
ALIMBARASHVILI, TS.N.; BABAYANTS, G.A.; BERIANIDZE, I. Sh.;
ZAKHAROV, P.V.; ISAAKYAN, A.G.; LEVIYEV, P. Ya.; MARTINSON, M.E.;
MRACHKOVSKIY, S.K.; NAYDICH, N.L.; NESTERVODSKAYA, Ye.M.;
RAZMANOVA, Ye.M.; SAVINA, K.V.; SERGEYEVA, A.V.; SOKOLOVA, M.Ye.;
FOMICHEVA, V.S.; CHERNYSHEVA, V.A.; SHUMILOVA, T.V.

Sensitivity of houseflies to chlorophos prior to its use.

Zh. mikrobiol. 40 no.7:3-7 J1'63

(MIRA 17:1)

VASHKOV, V.I.

Current status of the control of arthropods of medical significance.
Zhur.mikrobiol.,epid.i immun. 40 no.12:3-8 D '63.

(MIRA 17:12)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo dezinfektsionnogo
instituta Ministerstva zdavookhraneniya SSSR.

AUTHOR: Vashkov, V. I. (Professor); Volkova, A. P. (Candidate of biological

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45

ABSTRACT: This is a review of the literature on the role of the

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[illegible]

effect. The chemical stability and saturated vapor elasticity of the azotropic mixture is

1. 2017-01

ACCESSION NR: APh047680

SUBMITTED: 12Aug63

ED: 11

REF: 13. 00, 21

NR: 11

KOCHKIN, D.A.; VASHKOV, V.I.; DREKOVA, V.P.

Oxygen-containing organotin and organolead compounds. Part 4: Synthesis and insecticidal activity of stannanols and plumbanols, their acetates and methacrylates, hexaalkyldistannoxanes and polydialkyl(aryl)stannoxanes. Zhur.ob.khim. 34 no.1:325-328 Ja '64. (MIRA 17:3)

1. Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut Ministerstva zdravookhraneniya SSSR.

synergism of their bactericidal activity in the presence of ...
tin compounds, tetramethyldiphenyldisiloxane, and diphenyldimethacryloxy-
tin compounds, with respect to *Staphylococcus aureus* and *E.*

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical
Chemistry of the Academy of Sciences, USSR)

L 53581-65

ALEKSANYAN, A.B., prof.; BEZDENEZHNYKH I.S., doktor med. nauk;
 BELYAKOV, V.D., doktor med. nauk; BESSMERTNYY, B.S., dokt.
 med. nauk; VASHKOV, V.I., prof.; GROMASHEVSKIY, L.V.
 prof.; YELKIN, I.I., prof.; ZHDANOV, V.M., prof.;
 ZHMAYEVA, Z.M., kand. biol. nauk; KOVARSKIY, M.S., kand.
 med. nauk; NABOKOV, V.A., prof.; NOVOGORODSKAYA, E.M.,
 prof.; PAVLOVSKIY, Ye.N., akademik; PETRISHCHEVA, P.A.,
 prof.; PERVOMAYSKIY, G.S., prof.; POGODINA, L.N.; ROGOZIN,
 I.I., prof.; SUKHOVA, M.N., doktor biol. nauk; CHASOVNIKOV,
 A.A., kand. med. nauk; SHATROV, I.I., prof.; SHURABURA,
 B.L., prof.; YASHKUL', V.K., kand. med. nauk;
 ZHUKOV-VEREZHNIKOV, N.N., prof., otv. red.; BOLDYREV, T.I.,
 prof., red.; ZASUKHIN, D.N., doktor biol. nauk, red.;
 KALINA, G.P., red.

[Multivolume manual on the microbiology, clinical aspects
 and epidemiology of communicable diseases] Mnogotomnoe ru-
 kovodstvo po mikrobiologii, klinike i epidemiologii infek-
 tsionnykh boleznei. Moskva, Meditsina. Vol.5. 1965.
 548 p. (MIRA 18:3)

1. Deystvitel'nyy chlen AMN SSSR (for Aleksanyan,
 Gromashevskiy, Zhdanov, Zhukov-Verezhnikov). 2. Chlen-
 korrespondent AMN SSSR (for Rogozin, Boldyrev).

VASHKOV, V.I., doktor med. nauk prof.; SUKHOVA, M.N., doktor
biol. nauk; KERBAYEV, E.B., kand. med. nauk;
SHNAYDER, Ye.V., kand. med. nauk; DREMOVA, V.P., kand.
biol. nauk, retsenzent; VOLKOVA, A.P., kand. biol. nauk,
retsenzent; BRIKMAN, L.I., kand. biol. nauk, retsenzent;
VOLKOV, Yu.P., kand. khim. nauk, retsenzent; BESSONOVA,
I.V., biolog, retsenzent; ZUBOVA, G.M., biolog, retsenzent;
KARON, I.I., red.

[Insecticides and their use in medical practice] Insekti-
tsidy i ikh primeneniye v meditsinskoj praktike. Moskva,
Meditsina, 1965. 523 p. (MIRA 18:12)

L 30710-66 EWF(j)/EWT(1)/EAT(m)/T RM
ACC NR: AP5028989

SOURCE CODE: UR/0342/65/000/009/0031/0032

AUTHORS: Mal'tseva, T. A. (Aspirant); Virnik, A. D. (Senior research associate);
Rogovin, Z. A. (Professor); Shcheglova, G. V. (Aspirant); Vashkov, V. I. (Profe-
sor, Director)

ORG: Rogovin, Virnik (Moscow Textile Institute - Moskovskiy tekstil'nyy
institut); Shcheglova, Vashkov (Central Scientific Research Disinfection Institute
-- Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut)

TITLE: Antibacterial synthetic fibers and cloths

SOURCE: Tekstil'naya promyshlennost', no. 9, 1965, 31-32

TOPIC TAGS: textile, textile industry, bacteria, bactericide, silver

ABSTRACT: Antibacterial synthetic fibers were obtained by treating modified
fibers of polyvinylalcohol, cloth made from modified polypropylene fibers, and
jersey cloth made from modified capron fibers with the following bactericides:
silver, N-cetylpyridinal terramycin, streptomycin, and hexachlorophene. The
effectiveness of the treatment was determined by the effect it had on golden
staphylococcus and Escherichia coli bacteria. The experimental procedure

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UDC: 677:615.799.9

L 30710-66
ACC NR: AP5028989

followed that described previously by the authors (Tekstil'naya promyshlennost' 1965, 4, str. 15). The results are tabulated. It is concluded that fabrics may be made impervious to bacterial action by treating them with a suitable bactericide. Orig. art. has: 1 table.

SUB CODE: 11/ SUBM DATE: none/ SOV REF: 002

Card 2/2 LS

MAL'TSEVA, T.A., aspirant; VIRNIK, A.D., starshiy nauchnyy sotrudnik;
ROGOVIN, Z.A., prof.; SHCHEGLOVA, G.V., aspirant; VASHKOV, V.I., prof.

Antibacterial cellulose fibers and fabrics. Tekst. prom. 25
no.4:15-17 Ap '65. (MIRA 18:5)

1. Moskovskiy tekstil'nyy institut (for Mal'tseva, Virnik,
Rogovin). 2. Tsentral'nyy nauchno-issledovatel'skiy
dezinfektsionnyy institut (for Shcheglova, Vashkov).

MAL'TSEVA, T.A., aspirant; VIRNIK, A.D., starshiy nauchnyy sotrudnik;
ROGOVIN, Z.A., prof.; SHCHEGLOVA, G.V., aspirant; VASHKOV, V.I., prof.

Antimicrobial synthetic fibers and fabrics. Tekst. prom. 25
no.9:31-32 S '65. (MIRA 18:10)

1. Moskovskiy tekstil'nyy institut (for Mal'tseva, Virnik,
Rogovin). 2. Tsentral'nyy nauchno-issledovatel'skiy dezinfektsion-
nyy institut (for Shcheglova). 3. Direktor Tsentral'nogo nauchno-
issledovatel'skogo dezinfektsionnogo instituta (for Vashkov).

L 23403-66 EWT(1)/T RO/JK
ACC NR: AP6014012

SOURCE CODE: UR/0016/65/000/008/0003/0006

AUTHOR: Vashkov, V. I.; Khudakov, G. D.; Zakolodkina, V. I.

ORG: Central Scientific Research Disinfection Institute, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut)

TITLE: Rate of penetration and accumulation of p sup 32-labeled chlorophos in various organs and tissues of house flies

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 8, 1965, 3-6

TOPIC TAGS: tracer study, phosphorus, insecticide, entomology, biologic metabolism, animal physiology

ABSTRACT: Chlorophos (dipterex) labeled with p32 was applied in an amount of 0.6-0.9 gamma (LD50) to the back of female flies sensitive to insecticides. The content of chlorophos and of metabolites derived from it in various organs and tissues of the flies was determined by means of a counter within 30 minutes to 6 hours after application. The maximum amount of activity within 30 minutes, corresponding to 730/000 of that in the chlorophos applied initially, was found in the hemolymph. The next highest amount within 30 minutes (580/000) was found in the digestive system, followed by that in the brain ganglion (400/000). The activity in the hemolymph decreased to 40-50/000 within one hour and remained at that level during the next five hours. The activity in the brain ganglion remained at an approximately constant level for 2 hours.

UDC: 614.57:615.777/779]:[576.895.772.095.18

Cord 1/2

L 23403-66

ACC NR: AP6014012

decreasing towards the third hour, while that in the digestive system doubled towards the third hour and then began to decrease. The activity in the Malpighian vessels within 30 minutes and 1, 2, 3, 4, and 6 hours, respectively, was 11, 16, 33, 26, 74, and 29⁰/₀₀; that in wing muscles 5, 40, 29, 28, 23 and 12⁰/₀₀; and that in the thoracic gaglio 0, 0.6, 14, 0, 0, and 0⁰/₀₀.

Orig. art. has: 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: 23Feb65

Card 2/2 20

TITLE: A disinfection apparatus (sprayer duster) on a motorcycle

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 8, 1968, 27-31

TOPIC TAGS: disinfection apparatus, insect control, sanitation, light motor vehicle

ABSTRACT: The authors designed a small, efficient disinfection unit mounted on a motorcycle. It consists of a sprayer and duster which operate separately and have a single independent drive--a compact 3-hp internal-combustion engine of the "Druzhba" type. It can be used for treating the interior spaces of buildings, etc. of buildings. It is particularly valuable in rural localities for exhaustive disinfection after a person with an infectious disease is hospitalized. The disinfectant is supplied through a hose to the sprayer. The duster is used for treating the exterior of buildings.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858720013-6

Card 2 of 2

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858720013-6"

L 396.07-46. 57P(m)/57P(j)/T EM/ED-2
ACC NR: AP6000965 (A)

SOURCE CODE: UR/0206/05/000/001/0000/0000

AUTHORS: Rogovin, Z. A.; Vashkov, V. I.; Shluger, E. A.; Virsik, A. D.; Sushenkov, G. V.; Mal'tseva, T. A.; Hoshchitskiy, A. J.

ORG: none

TITLE: A method for obtaining bactericidal fabrics and fibers based on cellulose.
Class 29, No. 176363

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 46

TOPIC TAGS: bactericide, cellulose, biologic protective clothing

ABSTRACT: This Author Certificate presents a method for obtaining bactericidal fabrics and fibers based on cellulose, by the introduction of ionogenic groups and subsequent substitution with bactericidally active substances. To impart antimicrobial properties to the cellulose fabric (fiber), the latter is treated with the derivatives of hydroxi- or aminosulfo acids capable of reacting chemically with cellulose during their interaction with the bactericidally active substances. These substances may be salts of heavy metals or quaternary ammonium bases.

SUB CODE: 13,06

SUBM DATE: 18Oct62

Card 1/1 145

UDC: 677.46:615

ACC NR: AP6024436

SOURCE CODE: UR/0016/66/000/007/0024/0029

AUTHOR: Vashkov, V. I.; Dremova, V. P.; Starkov, A. V.; Volkova, A. P.; Sindorova, M. V.; Katunina, V. I.; Larionova, V. D.; Yerina, K. M.

ORG: Central Disinfection Institute, Moscow (Tsentral'nyy dezinfektsionnyy institut)

TITLE: Insecticidal properties of the various forms of DDVP and perspectives of their application for disinfection

SOURCE: Zhurnal mikrobiologii, epidemiologii, i immunobiologii, no. 7, 1966, 24-29

TOPIC TAGS: insecticide, aerosol, DDVP, insect ~~pest~~

ABSTRACT: Preparations of DDVP (0,0-dimethyl 0-2,2-dichlorovinyl phosphate) can be used for the immediate extermination of flies and domestic insects (bugs, cockroaches, fleas), in the form of 0.5—0.3% aqueous solutions. A minimal amount, assuring 100% destruction of flies, fleas, and bugs on finished surfaces (glass, wood) is 0.05—0.5 g, for cockroaches 1—2 g, per 1 m² (see Tables 1 and 2). Residual action at 18—20° lasts no longer than 5—7 days. To exterminate fly larvae in their substrate, a 0.2%—0.5% aqueous solution can be used at a standard flow rate of the pressure fluid (1—2 liters of solution for materials up to 30 cm thick. Bait for flies and cockroaches can be prepared from aqueous

Card 1/2

UDC: 616.981.452-092.9-097.3

ACC NR: AP6024436

solutions of DDVP. However, the short period (2 days) of residual action of such bait limits prospects for use in practice. DDVP dusts can be used to exterminate a number of domestic parasites. However, in view of the brief period of residual action, further study of the prospects for use in extermination practice is necessary. DDVP is toxic to animals when taken internally. (LD₅₀ of various samples of preparation is 100—200 mg/kg for mice.) Inhalation of a 0.5% aqueous solution during single or repeated spraying, does not induce any toxic effect in various animals. In preparing aqueous solutions and other forms of DDVP, precautionary measures must be observed, in view of the possibility of entry of the concentrated preparation into the mouth and skin. DDVP in aerosol or vapor form is especially promising.

[WA-50; CBE No. 11]

SUB CODE: 06/ SUBM DATE: 22Feb65/ ORIG REF: 002/ OTH REF: 002/

Card 2/2

ACC NR: AP0031637

(A)

SOURCE CODE: UR/0240/66/000/009/0015/0017

AUTHOR: Vashkov, V. I.; Volkova, A. P.; Tsetlin, V. M.; Yankovskiy, E. Ya.

ORG: Central Scientific Research Disinfectant Institute, Moscow (Tsentrall'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut); Central Design Bureau for the Chemical and Silicate-Ceramic Industry, Riga (Tsentrall'noye konstruktorskoye byuro khimicheskoy i silikatno-keramicheskoy promyshlennosti)

TITLE: Evaluation of the use of DDVP in an insecticide mixture

SOURCE: Gigiyena i sanitariya, no. 9, 1966, 15-17

TOPIC TAGS: insecticide, DDVP, pesticide, aerosol, cholinesterase activity, *toxicity*

ABSTRACT: The toxicity of 82.5%, 92.12% and 99.46% DDVP mixtures was tested on cats, rabbits, rats and mice enclosed in an aerosol chamber and exposed to aerosols with a density of 1 g/ml and a particle size of approximately 5 μ . The experiments were continued for 10 to 40 days and lasted about 2 hr each. Inhalation was less toxic than ingestion in nearly all cases: at an estimated concentration of 15-18 mg/m³ of air the compound produced no observable toxic effects over the entire 10-40 day period.

SUB CODE: 06/ SUBM DATE: 24Feb66/

[WA-50; CBE No. 12]

Card 1/1

UDC: 614.449.57:[614.484:615.778.3

ACC NR: AP6031637

(A)

SOURCE CODE: UR/0240/66/000/009/0015/0017

AUTHOR: Vashkov, V. I.; Volkova, A. P.; Tsetlin, V. M.; Yankovskiy, Z. Ya.

ORG: Central Scientific Research Disinfectant Institute, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut); Central Design Bureau for the Chemical and Silicate-Ceramic Industry, Riga (Tsentral'noye konstruktorskoye byuro khimicheskoy i silikatno-keramicheskoy promyshlennosti)

TITLE: Evaluation of the use of DDVP in an insecticide mixture

SOURCE: Gigiyena i sanitariya, no. 9, 1966, 15-17

TOPIC TAGS: insecticide, DDVP, pesticide, aerosol, cholinesterase activity, *toxicity*

ABSTRACT: The toxicity of 82.5%, 92.12% and 99.46% DDVP mixtures was tested on cats, rabbits, rats and mice enclosed in an aerosol chamber and exposed to aerosols with a density of 1 g/ml and a particle size of approximately 5 μ . The experiments were continued for 10 to 40 days and lasted about 2 hr each. Inhalation was less toxic than ingestion in nearly all cases: at an estimated concentration of 15—18 mg/m³ of air the compound produced no observable toxic effects over the entire 10—40 day period.

SUB CODE: 06/ SUBM DATE: 24Feb66/

[WA-50; CBE No. 12]

Card 1/1

UDC: 614.449.57:[614.484:615.778.3

VASHKOV, V. K.

"New means and methods of disinfection, disinsection and
deratization, and their utilization in the prevention of
infectious diseases."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

VASHKOVSKIY, A. V.

USSR/Radiophysics - Radiation of Radio Waves. Antennas, I-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35287

Author: Vashkovskiy, A. V., Gulyayev, G. G., Il'chenko, L. S.

Institution: None

Title: Single-Wire Feeder

Original

Periodical: Sb. statey nauch. stud. o-va Mosk. energ. in-t., 1955, No 8, 141-150

Abstract: None

Card 1/1

VASHKOVSKIY H.V.

12 июня
(с 10 до 18 часов)

А. В. Генин,
Л. А. Островский,
Г. М. Фрейман

К теории узарных магнетронных волн в плазме
и в ферритах

В. Я. Антонов

Новый метод измерения ширины спектральной линии
в ферритах

В. А. Манасов

К теории плазменных волн в ферритах на СВЧ

В. А. Манасов,
А. В. Виноградов

Исследование плазменных волн в ферритах на
СВЧ

12 июня
(с 18 до 22 часов)

А. К. Сильвер,
А. Я. Манасов

Резонансные ферритовые материалы

70

Н. Н. Козлов

Резонансные явления в магнетронных волнах фер-
ритных магнетронных генераторов, работающих на
высоких частотах ферритных устройств

М. М. Колесов,

Л. В. Манасов

Исследование плазменных волн в ферритах в поле
статического магнитного поля

Н. В. Виноградов

Экспериментальное исследование резонансов

report submitted for the Centennial Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in A. S. Popov (YUBIN), Moscow,
8-12 June, 1959

24.2200, 24.7900

77196
SOV/105-5-1-9/20

AUTHORS: Monosov, Ya. A., Vashkovskiy, A. V.

TITLE: Experimental Investigation of Nonlinear Phenomena
in Ferrites at SHF

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 1,
pp 105-116 (USSR)

ABSTRACT: The paper is an experimental study of nonlinear
phenomena taking place in ferrite at certain critical
amplitudes of the SHF field. The phenomena consist
in the appearance of an additional absorption region
and in the widening of the basic resonance absorption
line. The investigation of the above phenomena was
conducted at a high power level in the range of 3-cm
waves. The block diagram of the measuring installation
used for the study of additional absorption is shown
in Fig. 1.

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Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

77196
SOV/109-5-1-9/20

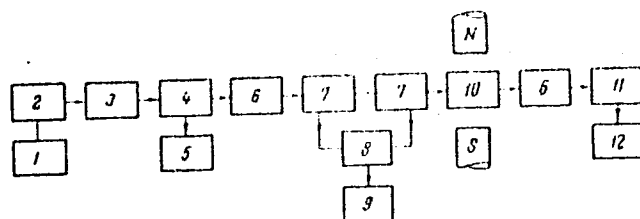


Fig. 1. Block diagram of the measuring installation for investigation of additional absorption in ferrite: (1) power supply; (2) magnetron; (3) ferrite valve; (4) power divider; (5) power absorber; (6) attenuators; (7) directional couplers; (8) DT switch; (9) power meter; (10) resonator; (11) detector; (12) oscillograph.

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The investigated ferrite sample was placed in a rectangular resonator with a wave of the H_{101} -type.

Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

77126

304/169-5-1-2/20

The resonator was tuned to 9,300 mc ($n = 1-7$). To investigate the widening of the ferromagnetic resonance line an installation analogous to the above was used. In this case the ferrite sample was placed in a short-circuited waveguide section. According to H. Suhl (see references at end of abstract) the widening of the resonance line of homogeneous precession is caused by parametric excitation of certain types of spin oscillations, the frequency of which coincides with the signal frequency. The above excitation takes place when an increasing SHF power signal passes a critical value characterized by the threshold amplitude h_{cr} defined as

$$h_{cr} = \sqrt{\frac{\Delta H_h}{4\pi M} \Delta H_c} \quad (1)$$

where ΔH is the half-width of the absorption line of the homogeneous precession; ΔH_c is the half-width of the absorption line of the spin oscillation type;

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Experimental Investigation of Nonlinear
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and $4\pi M$ is the saturating magnetization of ferrite.
The relationship between h_{cr} and the diameter D
of the spherical ferrite sample is shown in Fig. 3,

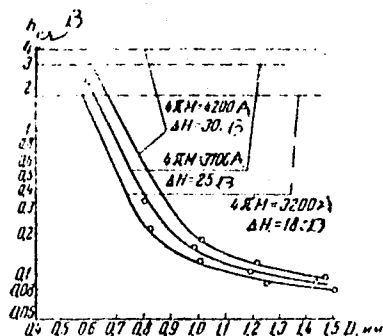


Fig. 3. Relationship Between
the Threshold Value h_{cr} for
Widening of the Resonance
Line and the Sphere Diameter
for Various Ferrites. Key to
Fig. 3: (A) gauss; (B) oersted.

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Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

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SCV/109-5-1-9/20

where the dotted lines indicate h_{cr} values calculated from Eq. (1) under the assumption that $\Delta H_k = \Delta H$.

These values are in good agreement with the experimental results for very small samples only ($D \sim 0.5$ mm). The phenomenon of additional absorption is illustrated by the visual picture shown in Fig. 4.

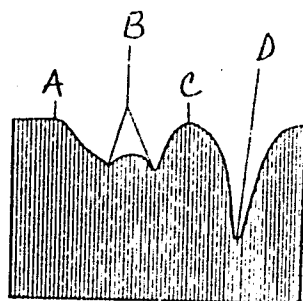


Fig. 4. Pattern of additional absorption observed on the oscillograph screen. Key to Fig. 4: (A) Lower limit; (B) Absorption peaks; (C) Upper limit; (D) Resonance of Homogeneous precession.

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Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

77195
SOV/100-5-1-9/20

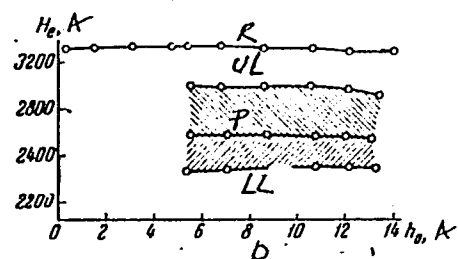
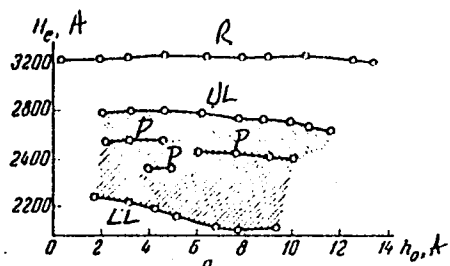
where the vertical lines correspond to the magnetron impulses, Figure 5 shows the relationship between the magnetizing fields for the peaks and limits of the additional absorption, and the intensity of the SHF magnetic field. Here, H_0 is the magnetizing field intensity and h_0 is the amplitude of the SHF magnetic field in the resonator. The threshold amplitude value at which the additional absorption appears has its smallest value when the sample is located at the node of the magnetic field, as shown in Fig. 5c. The threshold amplitude h_{th} depends strongly on the shape of the sample. (see Fig. 7).

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Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

77196

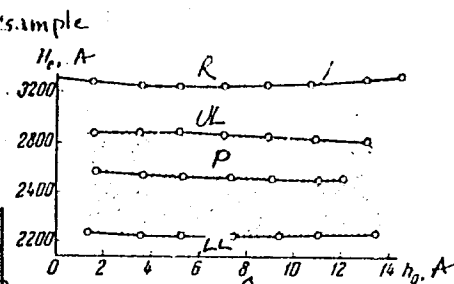
SOV/109-5-1-9/20



sample



sample



sample

A = oersted

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See Card 8/11 for Caption.

Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

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SOV/109-5-1-9/20

See Card 7/11 for Fig. 5.

Fig. 5. Relationship between the position of peaks and limits of the additional absorption region, and the amplitude of the SHF magnetic field in the resonator at various sample positions in the resonator: (a, b, c); Mn-ferrite, $4\pi M = 4200$ gauss; $D = 1.43$ mm; (UL, LL) upper and lower limits of the region of additional absorption; (P) absorption peaks; (R) resonance of homogeneous precession.

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Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

77196
SOV/109-5-1-9/20

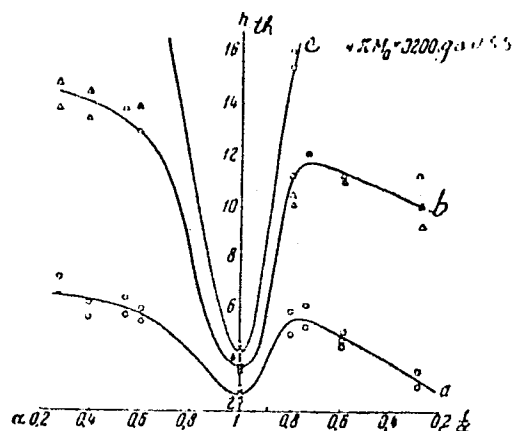


FIG. 7. Relationship between threshold values of magnetic field amplitudes at various points of the resonator (a, b, c) and the shape of the sample.

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Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

77196

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Here, the curves are plotted for spheroids of revolution characterized by $Q = b/a$, a and b being the spheroid axes. All curves have a minimum at $Q = 1$; i. e., for a sphere. Experiments conducted with spheres of 0.5-1.8 mm diameter have shown only a slight influence of the size of the sample on h_{th} .

The author arrives at the following conclusions:

- (1) The experimentally determined values of the magnetic field amplitude h_{cr} , at which the resonance line begins to widen, agree with the calculated values for very small samples only (spheres of 0.5-mm diameter). The values of h_{cr} decrease as the diameters increase.
- (2) The values of the threshold amplitudes h_{th} , at which the additional absorption appears, agree with the calculated values.
- (3) The values of h_{th} depend strongly on the shape of the sample and on the saturation magnetization of the ferrite. These values are different for various sample positions in the resonator.

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Experimental Investigation of Nonlinear
Phenomena in Ferrites at SHF

77196

SOV/109-5-1-9/20

The help of A. A. Pistol'kors and B. M. Mikhailov is acknowledged. The paper has 3 appendices. In the first appendix the computation of threshold levels is explained; in the second and third appendices, expressions are derived for the magnetic field amplitude in the short-circuited waveguide and in the resonator, respectively. There are 8 figures; 3 tables; and 9 references, 4 Soviet, and 5 U.S. The U.S. references are: R. W. Damon, Relaxation Effects in the Ferromagnetic Resonance, Rev. Mod. Phys., 1953, 25, 239; N. Bloembergen, S. Wang, Relaxation Effects in Paramagnetic Resonance, Phys. Rev., 1954, 93, 72; H. Suhl, The Nonlinear Behaviour of Ferrites at High Microwave Signal Levels, Proc. I.R.E., 1956, 44, 10, 1270; H. Suhl, The Theory of Ferromagnetic Resonance at High Signal Levels, Phys. Chem. Solids, 1957, 1, 2, 209; L. Walker, Magnetostatic Modes in Ferromagnetic Resonance, Phys. Rev., 1957, 105, 390.

June 13, 1959

SUBMITTED:
Card 11/11

S/141/63/006/001/008/018
E140/E135

AUTHOR: Vashkovskiy A.V.

TITLE: The influence of electric oscillations on the regeneration of magnetic oscillations of a gyrotropic sample

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, v.6, no.1, 1963, 85-94

TEXT: The influence of electric oscillations in ferrite on the magnetic oscillations, under the influence of a pumping field is taken into account by a method of successive approximations. Two special cases of regeneration of magnetostatic oscillations taking into account the influence of electric oscillations are considered: regeneration of magnetostatic oscillations of the type 2,0,1 with pumping field parallel to the bias field, and types 2,0,1 and 2,-1,0 with pumping field polarised in a plane perpendicular to the bias field. A corrected value for the pumping field threshold necessary for complete compensation of losses is obtained. An equivalent circuit for the oscillations in a gyrotropic spheroid is given by Fig.2. The proper magnetostatic
Card 1/3

The influence of electric ...

S/141/63/006/001/008/018
E140/E135

oscillations of the spheroid are given by the coupled circuits I and II, the electric oscillations at frequencies far off from those of I and II are given in circuits III, IV, which introduce additional losses. The total contribution from dielectric losses is small; of the order of 10 - 20%. Due to the nondiagonal components of the magnetic permeability vector, the threshold pumping field can be found to be higher or lower than in the more approximate solution. There are 2 figures.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR
(Radio Engineering and Electronics Institute,
AS USSR)

SUBMITTED: July 9, 1962

Card 2/3

1.13177-6
ACCESSION NR: AP4048266

of the radiating sphere. It is shown that in the degenerate re-generation mode, with the system tuned to the magnetostatic mode 2; 0, 1, the radiation is produced in the form of two waves H_{20} and H_{10} . The radiation at the E_{10} mode exceeds by more than one order of magnitude that of the H_{20} mode. Generation is possible in a very narrow magnetizing-field interval. The results obtained can be used to investigate the nonlinear properties of the system. The results of the investigations of the properties of the amplifier and the results of the measurements of the properties of the system are presented in the formulas.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR (Institute of Radio and Electronics AN SSSR)

SUBMITTED: 04Dec63

ENCL: 00

SUB CODE: EC, EM

NR REF SOV: 003

OTHER: 003

Card 2/2

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858720013-6

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858720013-6"

ACCESSION NR: AP5006028

tion. In mode B (three possible generation frequencies, at half the pump frequencies and two frequencies symmetrical to it) there is a different dependence on the saturation magnetization and on the ratio of the ferrite tails to the

L 22188-66 EWP(k)/EWT(1)/T GG/JXT(C2)

ACC NR: AP6002856

SOURCE CODE: UR/0286/65/000/024/0005/0005

AUTHOR: Monosov, A. Ya.; Vashkovskiy, A. V.

ORG: none

TITLE: Interaction of electromagnetic and ultrasonic waves

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 5

TOPIC TAGS: superhigh frequency, magnetic field, ultrasonic vibration, ultrasonic field, ferrite, electromagnetic wave

ABSTRACT: This Author Certificate announces a previously unknown phenomenon of the interaction between electromagnetic oscillations and ultrasonic vibrations (which differ in frequency from the electromagnetic oscillations) in a magnetized ferrite. The discoveries include: 1) under the action of an electromagnetic field on ferrite there arise some electromagnetic oscillations and ultrasonic vibrations as well as the parametric excitations; 2) with the action on ferrite of ultrasonic vibrations and a superhigh frequency (frequency $2f$) electromagnetic field, lower than the threshold of the parametric excitation, there arise electromagnetic oscillations (of

Card 1/2

L 22188-66

ACC NR: AP6002856

0

a frequency f) in the ferrite. /Publication of a discovery registered by the Committee for the Affairs of Inventions and Discoveries at the Council of Ministers, SSSR. No. 42 (Application No. OT-2900 of 21 March 1963)7

SUB CODE: 20/ SUBM DATE: 21Mar63

Card 2/2

nst

VASHKOVSKIY, I.
Name: VASHKOVSKI, I.

Dissertation: Geology and soils of the Tertiary and Quaternary periods
of the Oba Valley (Voronova-Kolpashevo sector) and the
lower Tomi

Degree: Cand Geol-Min.Sci

Defended at:

~~Affiliation:~~ Moscow State U imeni M. V. Lomonosov, Geological Faculty,
Chair of Soil Mechanics and Engineering Geology

Publication

~~Defense Date~~, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 2, 1957

PERTSEV, Ye., mayor intendantskoy sluzhby; VASHKOVSKIY, V., kapitan
intendantskoy sluzhby

How can potatoes and vegetables be preserved? Tyl i snab.
Sov. Voor. Sil 21 no.9:66-67 S '61. (MIRA 14:12)
(Vegetables--Storage)

ACCESSION NR: AP4041438

S/0188/64/000/003/0058/0067

AUTHOR: Vashkov'yak, M. A.

TITLE: Almost circular artificial earth satellite orbits

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 3; 1964, 58-67

TOPIC TAGS: celestial mechanics, artificial earth satellite, artificial satellite orbit, artificial satellite circular orbit, artificial satellite motion, artificial satellite orbital coordinate

ABSTRACT: This study is based on the results of two earlier papers (Aksenov, Grebenikov and Demin, *Iskusstvennyye sputniki Zemli*, No. 8, Izd-vo AN SSSR, 1961, pp. 64-71; Aksenov, *Kosmicheskiye luchy*, 2, No. 1, 1964); these earlier investigations considered the theory of the motion of an artificial satellite in the earth's normal field of attraction. The present author derives analytical expansions for satellite coordinates with an accuracy to the fourth degree of quasi-eccentricity e . In these expansions, converging for all intervals of time, all terms are retained having the first and second degree relative to the earth's flattening. As an illustration the author cites numerical results showing that the derived formulas are convenient for practical computations. Particular attention is given to

ACCESSION NR: AP4041438

the case where $e = 0$. Formulation of the problem is followed by derivation of expansions for the coordinates r , z and w , consideration of orbits with small inclinations, and specific examples. "The paper was written under the direction of Ye. P. Aksenov, to whom the author expresses his appreciation for valuable advice and guidance." Orig. art. has: 32 formulas and 2 figures.

ASSOCIATION: Kafedra nebesnoy mekhaniki i gravimetrii Moskovskogo universiteta
(Department of Celestial Mechanics and Gravimetry, Moscow University)

SUBMITTED: 25Jun63

ENCL: 00

SUB CODE: SV

NO REF SOV: 004

OTHER: 001

Card 2/2

1. VASNETULIN, P. N.
2. USSR (600)
4. Elder
7. Biology of the germination of red elder seeds.
Agrobiologiya no. 5, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

VASHKULAT, P. N., Cand Agr Sci -- (diss) "Study of ~~the~~
vegetative ^{ways} ~~ways~~ of reproduction of Amur cork (Phellodendron
amurense Rupr.)." Kinel', 1957. 15 pp with graphs (Min of
Higher Education USSR, Mos Forestry Engineering Inst), 110
copies (KL, 52-57, 109)

- 85 -

USSR/Forestry - Forest Cultures.

K.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15399

in the first and 41% in the second generation.
The study was completed in 1953-1955 at the forestry
faculty of Kuybyshev Agricultural Institute.
The bibliography has 11 listings.

Card 2/2

VASHKULAT, P.N.

USSR/Forestry - Dendrology.

K.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95828

Author : Vashkulat, P.N.

Inst : -

Title : On the Possibilities of Mixing Other Cork Tree Species
in Amur Cork Tree Plantings.

Orig Pub : Lesn. Kho-vo, 1958, No 1, 74.

Abstract : It is indicated that the decreased productivity of Amur
cork tree plantings in a series of places in the Ukraine
and Belorussia can scarcely be explained by the mixture in
them of Japanese cork as though it were an independent
species. The doubtfulness is noted of the presence of
independent Chinese and Japanese species, and attention
is turned to the very broad morphological variation of
the cork tree, which points rather to the presence in it
only of a series of geographical strains. In addition,

Card 1/2

- 14 -

VASHKULAT, P.N.

Abnormalities in the generative organs of Padus racemosa Gilib.
Bot.zhur. 44 no.6:848-850 Je '59. (MIRA 12:11)

1. Khabarovskiy pedagogicheskiy institut.
(Chokecherry) (Abnormalities (Plants))
(Color of flowers)

VASHKULAT, P.N.

Different regenerative capacity in roots of the same tree.
Bot.zhur. 44 no.11:1666-1673 N '59. (MIRA 13:4)

1. Khabarovskiy pedagogicheskiy institut.
(Regeneration (Botany)) (Roots(Botany)) (Amur cork tree)

S/236/63/000/001/005/015
D251/D308

AUTHORS: Prokopchik, A. Yu. and Vashkylis, A. I.

TITLE: Study of the properties of peroxycarbonates in solution
(1. Problem of the "true existence" of peroxycarbonates,
and their redox potentials)

SOURCE: Akademiya nauk Litovskoy SSR. Trudy. Seriya B. no. 1,
1963, 61-71

TEXT: The authors studied the redox potentials in solutions of various peroxycarbonates, in view of the lack of definite data regarding the difference between true peroxycarbonates and peroxyhydrates of ordinary carbonates. Platinum (smooth and platinized) and saturated calomel (reference) electrodes were used, with voltmeter A4-M2 (A4-M2); the accuracy was ~5%. The compounds studied were $K_2C_2O_6$ prepared in various ways, $KHCO_4$ and $K_2CO_3 \cdot 3H_2O_2$. It was found that at $-10^\circ C$ the potential of the Pt electrode was 300 - 400 mv higher in solutions of true peroxycarbonates (electrolytic, and those

Card 1/2

Study of the properties ...

S/236/63/000/001/005/015
D251/D208

formed from CO_2 and K_2O_2 , peroxyhydrates, and aq. alk. H_2O_2) than in H_2O_2 solutions, whilst no such difference was observed in solutions of the carbonate peroxyhydrates ($\text{K}_2\text{CO}_3 \cdot 3\text{H}_2\text{O}_2$). The substances formed from H_2O_2 and carbonates by salting out are thus regarded merely as addition compounds. Stability determinations showed the peroxycarbonate solutions to be stable only at low temperatures and high pH. There are 2 figures.

ASSOCIATION: Institut khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR (Institute of Chemistry and Chemical Technology of the AS Lithuanian SSR)

SUBMITTED: July 10, 1962

Card 2/2

VASHYANIN, A.I. [V. Vashanin, A.I.] PROKOPCHIK, A.D. [Prokopenko, A.]

Study of the properties of peroxycarbonates in solution. Report
No. " Polarographic study of peroxycarbonates. Trudy AN Lit. SSR.
Ser. B no. 2475-88 in 2. (MIRA 17:10)

1. Institut Khimii i Khimicheskoy Tekhnologii AN Litovskoy SSR.

PROKOPCHIK, A. Yu.[Prokopciukas, A.]; VASHKYALIS, A. Yu.[Vaskelis, A.]

On disintegration of calcium hypochlorite in a copper magnesium catalyst. Liet ak darbai B no.1:145-153 '61. (EEAI 10:9)

1. Institut khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR.

(Calcium hypochlorite) (Copper) (Magnesium)
(Catalysts)

VASHKYALIS, A.I. [Vashkalis, A.]

Polarographic determination of peroxyphosphates. Trudy AN Lit. SSR
Ser. B no.4:41-52, '62. (MIRA 18:3)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

VASHLYAYEV, N.M.; SHALAYEV, P.B.; SHALAYEV, N.B.

Increase in the operational reliability of exhaust fans. Prom.
energ. 20 no.1:26-29 Ja '65. (MIRA 18:4)

SOV/51-6-2-32/39

AUTHORS: Vashman, A.A., Lipis, L.V. and Teterina, N.A.

TITLE: A Very-High-Frequency Source for Excitation of Spectra in Gaseous Mixtures (Sverkhvysokochastotnyy istochnik vzbuzhdeniya spektrov smesey gazov)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 2, pp 260-262 (USSR)

ABSTRACT: The authors describe a magnetron circuit of 3000 Mc/s frequency which can be used for excitation of spectra of gaseous mixtures. The circuit is shown in Fig 1. The magnetron works continuously and has the following parameters: $U_a = 4150$ V, $I_a = 50-70$ mA, $U_n = 6.3$ V and the magnetic field (B) is 1200 gauss. To protect the operating personnel from very-high-frequency radiation the end of a waveguide (4 in Fig 1) and the cathode connections of the magnetron were screened. The gas to be analysed was in a quartz discharge tube (6) placed in the waveguide (4) at an e.m. wave antinode. The apparatus was used to excite argon-helium mixtures at pressures from 0.3 to 20 torr. It was found that the emission intensities were higher than those produced by means of 6 Mc/s sources. A table on p 261 gives the intensities (I_M) of certain lines in the spectra of pure helium, pure argon and 50% + 50% He-A mixture, excited using the magnetron circuit of 3000 Mc/s frequency.

Card 1/2

A Very-High-Frequency Source for Excitation of Spectra in Gaseous Mixtures SOV/51-6-2-32/39

These intensities are given in the form of ratios I_M/I_B where I_B is the intensity produced by excitation using a VG-generator of 6 Mc/s frequency. The spectra were excited at the optimum gas pressure in the discharge tube which was 6 torr for pure helium, 0.5 torr for pure argon and 0.5 torr for 50% + 50% helium-argon mixture. Temperature of the walls of the quartz discharge tube was 300-400°C when the VG-2 generator was used at 6 Mc/s compared to 40-50°C when the magnetron ($f = 3000$ Mc/s) was employed. When the 5875 Å helium line was excited at 3000 Mc/s its intensity was considerable at helium concentrations of the order of 10%, while 50% of helium was required to produce this line by means of the 6 Mc/s generator. Fig 2 shows the dependence of the logarithm of the intensity of 5875 Å helium line and 5888 Å argon line on the concentration of helium in a helium-argon mixture at various frequencies of excitation. There are 2 figures, 1 table and 6 English references.

SUBMITTED: August 10, 1958

Card 2/2

VASHMAN, A.A.

Electron paramagnetic resonance in ceramics based on Al_2O_3 . Zav. lab.
29 no.11:1315-1317 '63. (MIRA 16:12)

25(1)

PHASE I BOOK EXPLOITATION

SOV/1891

Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya

Elektrotermicheskaya obrabotka i elektreiskrevoye uprochneniye detalay; [sbornik]
(Electric Heat Treatment and Electrospark Hardening of Parts; Collection of
Articles) Moscow, Mashgiz, 1958. 214 p. (Series: Its: [Trudy] kn. 89)
Errata slip inserted. 5,600 copies printed.

Ed.: I.Yu. Miloslavskiy, Engineer (Deceased); Ed. of Publishing House: I. Yu.
Geller; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on General Tech-
nical and Transport Machine Building (Mashgiz): K.A. Ponomareva, Engineer.

PURPOSE: This collection of articles is intended for engineering staffs of plants
and scientific research institutes dealing with electric heating, electric heat-
treatment, and electrospark hardening of metals.

COVERAGE: This collection of articles presents the results of scientific research
work carried out by the Department of TsNIIIMash (Central Scientific Research
Institute of Technology and Machinery) on electric heating in the field of high

Card 1/8

Electric Heat Treatment (Cont.)

SOV/1891

and industrial-frequency heating and electrospark hardening of machine parts. The process of surface hardening, through hardening and tempering of steel and cast iron using induction-heating and electrospark methods, and the results of investigation of the effects of electric-heat treatment and electrospark hardening on the properties of steel and cast iron are described. A brief review of industrial applications of induction heating outside the Soviet Union are also presented. Various electric-heating and electrospark hardening equipment developed by TsNIITMash are described. The book was written for the 20th anniversary of the scientific research work of TsNIITMash, Department of Electric Heating.

TABLE OF CONTENTS:

Novikov, V. N., and Yu. M. Bogatyrev, Candidates of Technical Sciences. Work in the Field of Electric Heating and Electric Heat Treatment 5

The authors review the history of the development and application of electric heating and electric heat treatment of metals and describe new developments in the field. It is stated that for the past five years scientific and technological research work in the Department of Electric Heating was carried out in two principal directions: development of new production processes requiring high-temperature heating of

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metals, and development of new equipment and modernizing old types of equipment and apparatus.

Bogatyrev, Yu.M., Candidate of Technical Sciences, and Ye.I. Rumyantseva, Engineer.
Industrial Applications of Induction Heating Abroad

17

Based on available non-Soviet literature on induction heating, the authors survey various applications of induction heating outside the USSR. They describe the use of induction heating in the surface hardening of metals, in heat-treating welded joints, and in metal forging. In the conclusion it is stated that although induction-heating equipment is discussed in non-Soviet literature, there is a lack of information on the physical metallurgy of the electric heat-treating process.

Vashmova, T.A., and V.P. Pleshachkova, Engineers. Induction Heat Treatment of Bridge Crane Parts

30

The induction heat treatment of wheels, brake drums, and toothed sleeves of a 5-ton capacity bridge crane is described. The equipment used, and the regimes of heating, quenching, tempering, and data on deformation are given. This method is successfully used at the "Stal'most" Crane Building Plant.

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Novikov, V.N., Candidate of Technical Sciences. Investigating the Properties and Life of Induction Quench-hardened Rolls for Cold Rolling

42

The author recommends replacing chromium steel with a steel of higher fatigue resistance, development of new processes of electric heat treatment of rolls, and insuring the most efficient distribution of residual stresses in rolls. Concerning operation of rolls, the following rules are to be observed: periodical low-temperature annealing in oil, use of lubricant with a lower friction coefficient (maintaining the mechanical properties of the initial metal workpiece), determination and maintenance of the effective temperature of rolls, increase in the strip tension during rolling, insurance of stable regimes of draft by maintaining the same thickness of initial strips, reducing unit pressure of the work on the rolls, and decrease of amount of the relative drafts.

Bogatyrev, Yu.M., Candidate of Technical Sciences, and V.P. Pleshachkova, Engineer. Deformation of Surface-hardened Steel

70

The author discusses factors affecting the temperature of induction heating, the rate of cooling, the structure of the initial metal, and the regime of low-temperature tempering in deformation of ring-type samples of medium-carbon construction steel. The effect of replacing

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water by oil, and by other milder cooling agents, and the effect of the duration and the temperature of annealing are also discussed.

Klimochkin, M.M., Engineer. Surface Hardening of Nodular Cast Iron

87

The author presents the results of investigations on nodular cast iron heated for hardening by high frequency (300,000 to 350,000 cycles) current. He describes the structure and hardness of the surface, wear resistance, fatigue strength, and resistance to crack formation, and gives recommendations as to how to meet all these quality requirements.

Bogatyrev, Yu.M., and S.M. Gamazkov, Candidates of Technical Sciences.
Electric Tempering of Surface-hardened Parts by Sectional Heating

116

The article deals with the following: distribution of temperature along and across specimens during electrical heating, the hardness of specimens after surface hardening and induction tempering, the structure of the hardened layer, and the residual stresses in it. The author compares the data obtained with results from the common method of heating specimens in a furnace and he stresses the pronounced advantages of induction heating.

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Aleksandrov, V.V. (Deceased). Induction Heating-through of Large
Section Steel Parts

131

The author describes methods and equipment for the heating-through of steel forgings and hot stamping blanks using induction heating and sectional heating of pipe. The latter constitutes the main subject of this paper. Detailed data on current, frequency, temperature, rate of heating, and thermal losses in heating various sizes of pipes are given.

Bogatyrev, Yu.M., Candidate of Technical Sciences. Structure and Properties
of Steel Subjected to Electrical Through-heating

158

The author analyzes the method of induction through-heating of steel, the factors affecting uniform heating, and the cause of generation of thermal stresses. The investigation covered distribution of temperature along the cross section of the blank during electric heating, the structure of steel after treatment, and the mechanical properties of steel.

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Electric Heat Treatment (Cont.)

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Lagerkvist, S.A., Engineer, Low-voltage Equipment for Industrial Frequency Induction Heating

170

The author discusses various types of inductors, including flexible ones, for sectional heating of large parts using 50 cycles and up to 50 volts current. The simplicity of the construction of such inductors is indicated.

Ivanov, G.P., Candidate of Technical Sciences. Structure, Hardness, and Depth of a Layer Hardened by the Electrospark Method

188

The author discusses the mechanism of the electrospark hardening process and the effect of the current used and hardening time on the structure and depth of the layer. The dependence of hardness on the processing regimes and on the carbon content in processed steel is discussed and results of analysis of the structure are given. The author states that methods for mechanization of this process are now being developed.

Astaf'yev, S. S., Candidate of Technical Sciences. Electrospark Equipment Developed by TsNIITMash

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Electric Heat Treatment (Cont.)

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The author describes construction of two apparatus, the IAS-2M and IAS-3M developed by TsNIITMash for electrospark hardening of steel surfaces. Technical specifications for both are given, and directions for operating the machines and results that can be obtained with them are included.

AVAILABLE: Library of Congress

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VASHNIN, V.A. slesar'; VASIL'YEV, V.N. slesar'; GRINKEVICH, S.Z.,
slesar'

Eccentric clamp. Suggested by V.A.Vashnin, V.N.Vasil'ev, S.Z.Grinkevich.
Rats.i izobr.v stroi. no.9:15-17 '59. (MIRA 13:1)

1. Po materialam tresta No.5 Ministerstva stroitel'stva BSSR.
(Reinforced concrete)

VASHTENKO, K.; TOLOROV, R.; ZHIZHCHENKO, V.

VASHTENKO, K.; TOLOROV, R.; ZHIZHCHENKO, V. Free linear shrinkage of high-strength cast iron. p. 3,

Vol. 5, No. 5, Sept./Oct. 1956.

TEKHNIKA.

TECHNOLOGY

Sofia, Bulgaria

So: East European Accession, Vol. 6, No. 3, March 1957

VASHTERETS, A.D. (Alma-Ata); KRAMCHANINOV, N.F. (Alma-Ata); DFMIN, I.N. (Alma-Ata)

Materials on the history of the research on malignant tumors in
Russia; Horstman's works, 1796. Vop. onk. 11 no.1:120-122 '65.
(MIRA 18:6)

1. VASNUKOV, A., SKV RTSEV, I.
2. USSR (600)
4. Dairy Cattle
7. Dairy cattle breeding on the "Novaia Zhen" Collective Farm, Kolkhoz. No. 3, 1953

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

PODERGIN, V.A.; VASHUKOV, I.A.

Casting foundation parts for large metal-cutting machines without
using chills. Lit. proizv. no.9:26 S '61. (MIRA 14:9)
(Iron founding)

S/032/61/027/005/016/017
B132/B206

AUTHOR: Vashukov, I. A., Head (see Association)

TITLE: From the Central Laboratory of the Novosibirskiy zavod
"Tyazhstankogidropress" im. A. I. Yefremova (Novosibirsk
"Tyazhstankogidropress" Plant imeni A. I. Yefremov)

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 5, 1961, 624-625

TEXT: The activity of the Central Laboratory of the Plant was reorganized after the June Plenum of the TsK KPSS (CC CPSS) in 1959. Simultaneously with new material analyses, new technological processes were introduced into departmental production. In the course of 1960 test series were made at the Central Laboratory which produced a considerable economy effect. The laboratory for metal research conducted a study on the introduction of gas flame hardening of steel parts. In contrast to previous technology, forging is made with 5-8 t pressure and a diameter of 400-500 mm, and normalizing after pressing is achieved by tempering. The tests made it possible to utilize the forging heat for isothermal perlite formation. The material is put into the furnace directly from the press, and heated to

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B132/B206

From the Central Laboratory of the...

630-650°C, then left for 6 hr at 640-670°C and subsequently cooled in the furnace to 300°C. Further cooling is made in the open air, imparting to the metal a considerable wear resistance. The application of the new heat treatment resulted in savings of 120,000 rubles. Tests of nonmagnetic cast iron with low nickel content were made by metallography. Nonmagnetic cast iron with 2 % less nickel than provided in GOST (GOST) could be produced. The annual saving amounted to 160,000 rubles. The effect of thermal treatment on the quality of gears was also investigated. It was shown that it is unnecessary to temper steel 45 previous to mechanical treatment. The foundry laboratory conducted studies on the possibility of casting machine tool parts with increased wear-resistance without forced cooling. The laboratory cooperated with other plant departments in introducing fast-hardening mixtures into foundry production. These mixtures were made with liquid glass as a replacement of bronze casting by cheaper zinc alloys of the type ЦАМ (TsAM). The chemical laboratory conducted studies on the replacement of hot-dipping galvanizing with acidic electrolytes by hot-dipping in ammonium chloride electrolytes. The zinc layer was thus improved and the process was shortened. The zinc deposit developing thereby is of fine-grained structure and can be better passivated. A method for

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the protection of aluminum against corrosion by anodic oxidation in sulfuric acid solution was also developed. A rapid method for the determination of chrome in chrome- and chrome-nickel steel in the absence of vanadium and tungsten was developed. Chrome is oxidized with potassium permanganate to chromic acid and reduced by means of Mohr's salt solution in the presence of phenyl anthranilic acid. A rapid method for the determination of nickel was also developed. It is based on the precipitation of nickel by dimethyl glyoxime without previous filtering-off of graphite and silicone. The determination is then made by titration with Trilon B and takes 20-22 min. In this way nickel can also be determined in chrome-nickel steel. The physics laboratory deals with spectral analyses and the application of ultrasonics for the testing of materials, welded seams, and for degreasing and cleaning of machine parts. For 1961 it is planned to replace nearly all chemical analyses of smelted down ferrous- and nonferrous metal alloys by spectral analyses. The KTD Laboratory elaborated a portable device for the determination of the magnetic permeability of nonmagnetic materials. It serves for testing machine parts of various shape and surface condition. The automation of the cupola process control was also dealt with.

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From the Central Laboratory of the..

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B132/B206

ASSOCIATION: Tsentral'naya laboratoriya Novosibirskogo zavoda
"Tyazhstankogidropress" im. A. I. Yefremova (Central
Laboratory of the Novosibirsk "Tyazhstankogidropress" Plant
imeni A. I. Yefremov)

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VASHUKOV, I.A.; SOLODOVNIK, L.G.; MAYKOV, O.A.

Zircon antisticking paint. Lit. proizv. no.1:40 Ja '62.
(MIRA 16:8)

(Foundries--Equipment and supplies)

VASHUKOV, I.A.; MAYKOV, O.A.

Mechanical properties of cerium cast iron at high temperatures.

Lit. proizv. no.6:33-34 Je '62.

(MIRA 15:6)

(Cast iron—Testing) (Metals at high temperatures)

SOLODOVNIK, L.G.; MAYKOV, O.A.; VASHUKOV, I.A.; PODERGIN, V.A.

Special core mixtures for casting iron cylinders. Lit. proizv.
no.6:36 Je '62. (MIRA 15:6)

(Sand, Foundry) (Coremaking)

VASHUKOV, I.A.; LYUBOVSKAYA, V.Ye.; PESOCHINA, Ye.T.; MAYKOV, O.A.

Use of charcoal for the heating of large risers. Lit.proizv.
no.7:10-11 J1 '62. (MIRA 16:2)
(Risers (Founding))